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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,898	07/21/2003	Douglas B. Alston	030225	7643
26285	7590	05/19/2005	EXAMINER	
KIRKPATRICK & LOCKHART NICHOLSON GRAHAM LLP 535 SMITHFIELD STREET PITTSBURGH, PA 15222			ADDY, ANTHONY S	
			ART UNIT	PAPER NUMBER
			2681	
DATE MAILED: 05/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/623,898	ALSTON, DOUGLAS B.
Examiner	Art Unit	
Anthony S. Addy	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 21 July 2003.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 19 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 11, applicant recites the limitation "the computing device" on line 4 of claim 11, however there is insufficient antecedent basis for this limitation in the claim.

With respect to claim 20, applicant recites the limitation "the computing device" on line 3 of claim 20, however there is insufficient antecedent basis for this limitation in the claim.

For examination purposes, the examiner is considering the limitation to read as "a computing device."

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

**Ross et al., U.S. Publication Number 2004/0058651 A1 (hereinafter Ross), and**

further in view of **Phillipi et al., U.S. Publication Number 2004/0044761 A1** (hereinafter **Phillipi**).

Regarding claim 1, Ross teaches a system comprising; a service measurement database having stored therein network service measurement data relating to a network (see paragraph 0025, lines 1-9 and Figures 1 & 2; where a network optimization database 32 [i.e. reads on service measurement database] is shown); and a server in communication with the service measurement database (see paragraph 0025, lines 1-9 and Figures 1 & 2; where a network optimization database 32 is shown in communication with server 16), wherein the server estimates a network optimization data for a device that is in communication with the network based on the network service measurement data and a parameter received from the device that is in communication with the network (see paragraph 0032, lines 1-4, paragraph 0034, lines 13-20 and paragraph 0039, lines 1-13). Ross fails to explicitly teach the server estimates a data throughput for a device.

Phillipi however teaches a system and method for broadband network optimization, comprising calculating network throughput based on first and second parameters and communicating the network throughput to a communications device (see paragraph 0053, lines 1-70). One of ordinary skill in the art further recognizes that, the network optimization data calculated by server 16 as taught by Ross, broadly reads on a data throughput of the system.

It would therefore have been obvious to one of ordinary skill in the art at time of the invention to incorporate the teachings of Phillipi to system of Ross to include a

server that estimates a data throughput for a device to maximize the throughput or capacity of broadband network communications as taught by Phillipi (see paragraph 0002, lines 1-4).

Regarding claim 2, Ross in view of Phillipi teaches all the limitations of claim 1. Ross further teaches a system, wherein the server includes an application server (see paragraph 0020, lines 4-9, paragraph 0024, lines 8-24 and Fig. 1; where a server 16 is shown).

Regarding claim 3, Ross in view of Phillipi teaches all the limitations of claim 1. Ross further teaches a system, wherein the network is one of a wireless network, a wireline network, the Internet, an intranet (see paragraph 0020, lines 1-7, paragraph 0020, lines 15-17 and Fig. 1).

Regarding claim 4, Ross in view of Phillipi teaches all the limitations of claim 1. Ross further teaches a system, wherein the device includes one of a personal computer and a handheld computing device (see paragraph 0020, lines 1-4, paragraph 0020, lines 12-17 and Fig. 1).

Regarding claim 5, Ross in view of Phillipi teaches all the limitations of claim 1. Ross further teaches a system, further comprising a modem in communication with the device (see paragraph 0020, lines 21-25).

Regarding claim 9, Ross in view of Phillipi teaches all the limitations of claim 1. Ross further teaches a system, wherein the server is in communication with a service center (see paragraph 0025, lines 1-9, paragraph 0026, lines 1-4 and Fig. 1; where

other network servers 34 is shown in communication with server 16 [i.e. other network servers 34 reads on a service center in communication with server 16]).

Regarding claim 10, Ross in view of Phillipi teaches all the limitations of claim 5. Ross further teaches a system, wherein the modem is one of a wireless modem and a landline modem (see paragraph 0020, lines 21-25).

Regarding claim 11, Ross teaches a method of communicating a network optimization data to a user device (see paragraph 0013, lines 1-11 and paragraph 0011, lines 1-27), comprising: receiving a first parameter from a communication device that is in communication with a computing device (see paragraph 0029, lines 1-3 and paragraph 0030, lines 23-27); receiving a second parameter from a service measurement database (see paragraph 0031, lines 8-13, paragraph 0025, lines 1-7, paragraph 0040, lines 11-19 and it is inherent the network status data [i.e. reads on second parameter] is transmitted from a network optimization database 32); and communicating a network optimization data to the communication device (see paragraph 0032, lines 1-4, paragraph 0034, lines 13-20 and paragraph 0039, lines 1-13). Ross fails to explicitly teach calculating a relative network throughput based on the first and second parameters and communicating the relative network throughput to the communications device.

Phillipi however teaches a system and method for broadband network optimization, comprising; calculating network throughput based on first and second parameters and communicating the network throughput to a communications device (see paragraph 0053, lines 1-70).

It would therefore have been obvious to one of ordinary skill in the art at time of the invention to incorporate the teachings of Phillipi to the method of Ross to include calculating a relative network throughput based on the first and second parameters and communicating the relative network throughput to the communications device to maximize the throughput or capacity of broadband network communications as taught by Phillipi (see paragraph 0002, lines 1-4).

Regarding claim 12, Ross in view of Phillipi teaches all the limitations of claim 11. Ross further teaches a method, wherein receiving the first parameter includes receiving the first parameter via a network (see paragraph 0029, lines 1-4 and paragraph 0020, lines 1-17).

Regarding claim 13, Ross in view of Phillipi teaches all the limitations of claim 12. Ross further teaches a method, wherein receiving the first parameter via a network includes receiving the first parameter via the Internet (see paragraph 0029, lines 1-4 and paragraph 0020, lines 1-17).

Regarding claim 14, Ross in view of Phillipi teaches all the limitations of claim 11. Ross further teaches a method, wherein receiving a first parameter includes receiving one of a received signal strength (RSS), a signal-to-interference ratio (SIR), a primary serving site, a sector and a carrier (see paragraph 0028, lines 12-18).

Regarding claim 15, Ross in view of Phillipi teaches all the limitations of claim 11. Ross further teaches a method, wherein receiving a second parameter includes receiving one of an indication of total voice traffic/sector/carrier, an indication of total data traffic/sector/carrier, and indication of origination failures, and an indication of

dropped calls (see paragraph 0031, lines 8-13, paragraph 0025, lines 1-16, paragraph 0040, lines 11-19 and it is inherent the network status data, broadly reads on one of an indication of total voice traffic/sector/carrier, an indication of total data traffic/sector/carrier, and indication of origination failures, and an indication of dropped calls).

Regarding claim 6 and 16, Ross in view of Phillipi teaches all the limitations of claims 5 and 11. Ross fails to explicitly teach a system and method, wherein communicating the network throughput to the communication device includes communicating the network throughput to a modem. However, the examiner takes Official Notice that it is well known in the art to communicate a network throughput to a communication device through a modem, since such devices are connected to the network through a modem. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system and method of Ross and Phillipi to include communicating the network throughput to the communication device through a modem, to indicate to the user of a communication device an indication of a throughput of the system, so that the user of the communication device can adapt their interactions with the system accordingly.

Regarding claims 7, 8 and 17, Ross in view of Phillipi teaches all the limitations of claims 5 and 16. The combination of Ross and Phillipi fails to explicitly teach a system and method, wherein the modem includes a display area that is configured to display an indication of the throughput of the network. However, the examiner takes Official Notice that it is well known in the art for a modem to include a display area that

is configured to display an indication of the throughput of the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system and method of Ross and Phillipi to include a modem with a display area that is configured to display an indication of the throughput of the network, to indicate to the user of a communication device coupled to a modem an indication of a throughput of the communication network, so that the user of the communication device can adapt their interactions with the network accordingly.

Regarding claims 18 and 19, Ross in view of Phillipi teaches all the limitations of claim 11. Ross fails to explicitly teach a method, wherein calculating the network throughput includes calculating a forward link relative throughput as one of a numerical value and a range of numerical values.

Phillipi however teaches a system and method for broadband network optimization, wherein calculating the network throughput includes calculating a forward link relative throughput as one of a numerical value and a range of numerical values (see paragraph 0053, lines 1-70).

It would therefore have been obvious to one of ordinary skill in the art at time of the invention to incorporate the teachings of Phillipi to the method of Ross, wherein calculating the network throughput includes calculating a forward link relative throughput as one of a numerical value and a range of numerical values, such that an optimum values of transmission variables are found that result in the maximum throughput or capacity of broadband network communications as taught by Phillipi (see paragraph 0002, lines 1-4 and paragraph 0053, lines 42-53).

Regarding claim 20, Ross teaches an apparatus, comprising: means for receiving a first parameter from a communications device that is in communication with a computing device (see paragraph 0029, lines 1-3, paragraph 0030, lines 23-27 and Figures 1 & 2; where wireless devices 12, 18, and 20 are shown able to transmit wireless device status data to server 16 [computing device]); means for receiving a second parameter from a service measurement database (see paragraph 0031, lines 8-13, paragraph 0025, lines 1-7, paragraph 0040, lines 11-19 and Figures 1 & 2; where a network optimization database 32 is shown in communication with server 16); and means for communicating network optimization data to the communication device (see paragraph 0032, lines 1-4, paragraph 0034, lines 13-20, paragraph 0039, lines 1-13 and Figures 1 & 2). Ross fails to explicitly teach means for calculating a network throughput based on the first and second parameters.

Phillipi however teaches a system and method for broadband network optimization, comprising calculating network throughput based on first and second parameters and communicating the network throughput to a communications device (see paragraph 0053, lines 1-70 and Figures 7 & 8).

It would therefore have been obvious to one of ordinary skill in the art at time of the invention to modify the system of calculating network throughput based on first and second parameters as taught by Phillipi to the system of Ross to include means for calculating a network throughput based on the first and second parameters to maximize the throughput or capacity of broadband network communications as taught by Phillipi (see paragraph 0002, lines 1-4).

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Olofsson et al., U.S. Patent Number 6,668,159 discloses terminal bitrate indicator.

Flammer, III et al., U.S. Patent Number 6,480,497 discloses method and apparatus for maximizing data throughput in a packet radio mesh network.

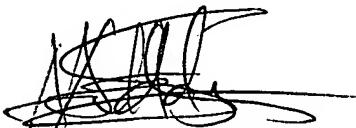
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony S. Addy whose telephone number is 571-272-7795. The examiner can normally be reached on Mon-Thur 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel L. Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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May 13, 2005



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